WHAT IS CLAIMED IS:

1. A current cell comprising:

a first transistor coupled to an output of the current cell and to a first input of the current cell;

a second transistor coupled in series with the first transistor and coupled to a bias input; and

a third transistor having a gate and a substrate coupled to a gate and a substrate of the second transistor, respectively, and a drain and a source coupled to a second input of the current cell.

2. The current cell of claim 1, having a gate of the first transistor coupled to the first input, a drain of the first transistor coupled to the output, a source of the first transistor coupled to a drain of the second transistor, and a source of the second transistor coupled to a ground.

3. The current cell of claim 1, wherein the second input of the current cell is configured to receive a signal that is a compliment of the first signal received at the first input.

4. The current cell of claim 1, wherein the first transistor is configured as a switching transistor, and the second transistor is configured as a current source.

5.   The current cell of claim 1, further comprising:

a resistor coupled between the gates of the second and third transistors and the bias input.

6.   The current cell of claim 1, wherein each of the first, second, and third transistors are at least one of N-type MOSFETs and P-type MOSFETs.

7.   An apparatus comprising a plurality of current cells, wherein each current cell includes:

a first transistor configured as a switching transistor, the first transistor is coupled to an output and to a first input configured to receive a first signal;

a second transistor coupled in series with the first transistor, the second transistor is configured as a current control transistor and is coupled to a bias input; and

a third transistor having a gate and a substrate coupled to a gate and a substrate of the second transistor, respectively, and a drain and a source coupled to a second input configured to receive a second signal that is a compliment of the first signal.

8.   The apparatus of claim 7, wherein the plurality of current cells are coupled in parallel at respective outputs and bias inputs and the plurality of current cells are coupled to a plurality of digital signals at respective first and second inputs.

9.   The apparatus of claim 7, wherein each current cell further includes:

a resistor coupled between a gate of the second transistor and the bias input.

10.   The apparatus of claim 7, wherein the apparatus comprises at least one of a digital to analog converter, wave-shaper, controlled current source, and pulse generator, a microprocessor, a computer system, a network interface device, a bus interface, and a single ended digital signal driver.

11.   A circuit comprising:

a first transistor coupled to an output of a current cell and to a first input of the current cell;

a second transistor coupled in series with the first transistor; and

a third transistor coupled between a bias input of the current cell and a gate of the second transistor, a gate of the third transistor is coupled to a second input of the current cell.

12.   The circuit of claim 11, having a gate of the first transistor coupled to the first input, a drain of the first transistor coupled to the output, a source of the first transistor coupled to a drain of the second transistor, a source of the second transistor couple to a ground, a drain of the third transistor coupled to the bias input, and a source of the third transistor coupled to the gate of the second transistor.

13.   The circuit of claim 11, further comprising:

logic configured to generate a first signal and a second signal, wherein the second

signal that goes HIGH after the first signal goes HIGH, the second signal goes LOW before

the first signal goes LOW and, the first signal is coupled to the first input and the second

signal is coupled to the second input.

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15.   The circuit of claim 14, wherein the logic comprises

a first, a second, a third and a fourth inverter coupled in a series configuration; and

a NOR gate having a first gate input coupled to an output of the fourth inverter and a

second gate input coupled an input of the first inverter and to a reference signal, wherein the

first signal is generated at a node coupling an output of third inverter to an input of the

fourth inverter and wherein the second signal is generated by an output of the NOR gate.

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16.   The circuit of claim 11, wherein the first, second, and third transistors are at least one

of N-type MOSFETs and P-type MOSFETs.

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17.   An apparatus comprising at least one current cell, each current cell including:

a first transistor configured as a switching transistor, the first transistor coupled to an

output and to a first input configured to receive a first signal

a second transistor coupled in series with the first transistor, the second transistor

configured as a current control transistor; and

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a third transistor configured as a switching transistor between a bias input and a gate of the second transistor, the third transistor coupled to a second input configured to receive a second signal.

18. The apparatus of claim 17, wherein the apparatus comprises at least one of a digital to analog converter, wave-shaper, controlled current source, and pulse generator, a microprocessor, a computer system, a network interface device, a bus interface, and a single ended digital signal driver.

19. The apparatus of claim 18, wherein the single ended digital signal driver comprises a B-class driver.

20. The apparatus of claim 17, wherein each current cell is coupled to logic configured to generate a first signal and a second signal, wherein the second signal goes high after the first signal goes high and wherein the second signal goes low before the first signal goes low and wherein the first signal is coupled to the first input and the second signal is coupled to the second input.

21. A method of controlling a current source comprising:

receiving a first signal that controls a first switching transistor, wherein the first switching transistor is coupled to an output;

receiving a bias signal that controls a second transistor configured as a current source,

wherein the second transistor is coupled in series with the first transistor; and

receiving a second signal that is a compliment of the first signal, wherein the second

signal is coupled to a drain and a source of the third transistor and wherein a gate and a

substrate of the third transistor are coupled to a gate and a substrate of the second transistor,

respectively.

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22. The method of claim 21, further comprising:

coupling a plurality of current cells in parallel at respective outputs and bias inputs,

wherein each current cell includes first, the second and the third transistors and inputs to

receive bias, first and second input signals and an output.

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23. The method of claim 22, further comprising:

receiving a plurality of digital signals at first and second inputs of the plurality of

current cells.

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24. The method of claim 23, further comprising

generating a current output that is increases by a same incremental amount as each

respective current cell is successively activated.

25. The method of claim 23, further comprising

generating a current output that is increases in a binary weighted manner as each respective current cell is successively activated.

26. A method of controlling a current source comprising:

receiving a first signal that controls a first transistor, the first transistor being coupled between an output and a second transistor; and

receiving a second signal that turns ON a third transistor after the first signal turns ON the first transistor and turns OFF the third transistor before the first signal turns OFF the first transistor, the third transistor being coupled between a gate of the second transistor and a bias voltage input.

27. The method of claim 26, further comprising:

coupling a plurality of current cells in parallel at respective outputs and bias inputs, wherein each current cell includes the first, the second and the third transistors and inputs for receiving a bias, first and second input signals and an output.

28. The method of claim 27, further comprising:

receiving a plurality of digital signals at respective first and second inputs of the plurality of current cells.

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29.   The method of claim 28, further comprising

generating a current output that is increases by a same incremental amount as each

respective current cell is successively activated.

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30.   The method of claim 28, further comprising

generating a current output that is increases in a binary weighted manner as each

respective current cell is successively activated.